REDACTED VERSION

PROJECT NAME: Wilcox Oil Residence Site
PROJECT JOB NO: WO6-28
PROJECT LOCATION: Bristow OK
CONTRACT NO.: EP-S4-16-04
TASK ORDER NO.: 0028

1.0 SITE BACKGROUND

The Wilcox Oil Residence (Site) is located at (b) (6) [redacted] in Bristow, OK. The residential property is located on the Wilcox Oil NPL Site. The site was formerly an Oil Refinery. The primary Contaminants in the soil are PAHs including benzo (a) pyrenes. A removal action has been scheduled to mitigate the threats to residence health, and the environment posed by the presence of hazardous substances found at the site.

2.0 SCOPE OF WORK

Environmental Restoration has been tasked by the EPA Region 6 under Task Order (TO) 0028 to perform a time critical removal action at the Site. The major project tasks shall consist of the following items as identified in the TO Statement of Work (SOW) and during the initial site walk;

1) Mobilize necessary personnel and equipment;
2) Setup support facilities / work zones;
3) Excavate identified grids to targeted depths as directed by OSC;
4) Manage and consolidate excavated soils for disposal;
5) Arrange transportation and disposal of impacted soils in accordance with CERCLA and DOT regulations;
6) Site restoration.
7) Demobilize personnel and equipment as necessary.

3.0 OPERATIONAL APPROACH

The following sections discuss ER's approach to the execution of the TO SOW tasks. Significant tasks are identified with details on how ER will accomplish the SOW requirements. ER will maximize site resources by utilizing personnel and equipment on an "as needed" basis and with the consent and approval of the OSC.

3.1 PRE-MOBILIZATION ACTIVITIES

ER will prepare the following plans for submittal, review and acceptance by the US Environmental Protection Agency prior to site mobilization/implementation.

- ✓ *Work Plan*
- ✓ *Site Health and Safety Plan* (HASP) - Shall detail the various levels of personal protective equipment, decontamination, and emergency procedures that will be provided to the OSC for approval prior to commencement of work.

ER has begun solicitation and procurement efforts to initiate the commencement of on-site operations. The following is an initial list of items to be identified and addressed prior to mobilization;

- ✓ Contact Oklahoma One Call and request utility locate and marking of services entering the site.

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- ✓ Local suppliers will be identified for PPE, construction supplies, backfill and transportation services;
- ✓ Begin solicitation for T&D of waste materials / Determine the most cost effective options, and scheduling, for T&D;
- ✓ Equipment and material sources will be identified and tentatively scheduled; and
- ✓ Solicit and procure lodging accommodations as required for site personnel.

3.2 MOBILIZATION

Mobilization will occur from the nearest mobe point and shall consist of the Response Manager (RM), Field Cost Administrator (FCA), (1) Equipment Operator, and (2) Laborers. The initial mobilization is scheduled for the week of August 28, 2017 and will include mobilization of required site equipment and materials identified to complete the project. ER will mobilize/demobilize personnel, equipment, and materials as warranted by site tasks/operations. RM will directly coordinate with the OSC in determining resources required to perform the identified tasks.

In accordance with the Federal Acquisition Regulation for travel costs, the Wilcox Oil Residence Site is located outside the 50 mile radius of ER's Denver Office location, thus per diem/travel costs will be incurred on the project.

3.3 SITE PREPARATION - STAGING AREA / COMMAND POST

ER will begin site preparations upon initial mobilization to the site. Site preparations will include the following items;

- ➢ HASP review and site orientation with site crew;
- ➢ Delineate Support Zone, Contamination Reduction Zone and Exclusion Zones; use pin flags and/or temporary construction fencing to delineate grids and traffic routes on-site;
- ➢ Establish area for Command Post (EPA RV)
- ➢ Arrange on site portable toilets and hand wash stations.

3.4 EXCAVATION OPERATIONS

As noted, ER will coordinate with locate services to ensure that all below-ground utility companies are contacted and mark/flag any services that transect the site. This will be accomplished with spray paint or other means to note the "approximate" location of the service. During removal operations, adjacent to the estimated location of the utility service, personnel will hand-dig all utility intersections to a depth necessary to expose the utility or to the maximum extent of the proposed excavation.

Excavation will begin in the contaminated grids identified by prior site assessments. Excavation depths may vary and will be guided by visual oil contamination or as directed by the OSC. Once excavation areas are determined to be clear of contaminants, the excavation will then be ready for backfilling, tamping and grading.

Due to the nature of oil contamination saturating the soil, it is anticipated that dust control will not be necessary during excavation operations. ER will procure and locate a water truck prior to mobilization to be on standby in the event that site conditions warrant the need for dust control.

3.5 SITE RESTORATION

The completed and cleared grids will be backfilled with material that has been sampled and approved for use. The grid will be backfilled in 6" to 8" lifts with initial compaction accomplished using the skid steer. Depending on depth of excavation, a vibratory roller/compactor may be utilized to achieve final

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compaction if necessary. It is anticipated to utilize more cost effective backfill type material to within 6" inches of the final site grade elevation, with the top 6" inches completed with a higher topsoil quality material. All material will be sampled per OSC direction, before being allowed to be used on-site. ER will consult with EPA / START on obtaining confirmation sample and what the required analytical will be required.

Hydroseeding will be utilized to revegetate the restored areas. It is anticipated to utilize a seed mixture native and typically found in this weather climate. Watering the vegetation upon completion shall be the responsibility of the property owner unless otherwise direct by the OSC.

3.6 STOCKPILE STAGING AND MANAGEMENT

Excavation operations will be coordinated in such a manner as to limit the footprint and volume of spoil stockpiles to the degree possible. Excavated spoil will be situated on a contaminated grid and not placed on non-contaminated areas, if possible. The stockpile footprint will be sufficiently contained to avoid potential cross-contamination of adjacent grids.

3.7 DECONTAMINATION

When a piece of equipment is removed from an excavation area, the tracks, wheels, buckets, etc. will be properly decontaminated. The primary method of decontamination will be to remove clinging soil using shovels, brooms, and brushes. Equipment decontamination will take place in the excavation area where the soil will be picked up and placed into a dump truck for disposal. If dry decontamination is not sufficient, high pressure water will be used. It is the goal to minimize the use of water so an additional waste stream is not created, any water generated will be utilized in dust control of stockpiles.,

3.8 TRANSPORTATION AND DISPOSAL

Transportation and disposal will be arranged and profiled prior to mobilization. Due to site access constraints, tandem axle dump trucks will be utilized to transport the soil. Drivers will be requested to remain in their trucks during loading operations. The equipment operator will have one (1) spotter to facilitate trailer loading. Should any personnel enter within twice the boom length of the excavator at any time, the operator is to drop his boom and remove his hands from the controls. Once the all clear is given, loading operations may resume.

ER will load the soil from the stockpile staging area or directly from the excavation into dump trucks for shipment off site. Each load will be properly manifested and tarped for transport to the selected disposal facility. ER anticipates loading the material frequently to minimize the amount of soil stockpiled at the staging area. Stabilized truck entrances, brooming off tailgates, and other engineering controls will be implemented to ensure soil is not tracked into public streets. In addition, the paved street adjacent to the property will be swept daily to remove excess mud, dirt, or rock tracked from the site.

Disposal of the projected waste streams will be awarded through a competitive bid process. The successful bidder's proposed facility will comply with the CERCLA offsite disposal rule (CERCLA status) and must be in good standing prior to award.

4.0 RESOURCES

The following table identifies the different resources ER will employ to complete the SOW elements, resources shall fluctuate based on the current site tasks and what is require to maximize operations.

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PERSONNEL	QUANTITY	COMMENTS
Response Manager	1	Rafa Aguero
Equipment Operator	1	TBD
Laborer	2	TBD
T&D Coordinator	1	Evan Wortman
FCA	1	Robert Crawford
EQUIPMENT	**QUANTITY**	**COMMENTS**
Truck, P/U	2-3	ER owned
Excavator	1	Rental
Skid Steer	1	Rental
Roller /Compactor	1	Rental (TBD if necessary on site)
Water Truck	1	Rental (TBD if necessary on site)
Portable Toilets / Wash Stations	2	Rental
Misc. Hand Tools	1	Rental

5.0 DELIVERABLES

The following section shall provide a description and the purpose of deliverable items not previously discussed in Section 3.1 of this work plan.

5.1 DAILY TOOL BOX SAFETY MEETINGS

Daily Tool Box Safety Meetings will be held prior to the start of any work shift. These meetings will be conducted to address safety concerns for that operational period of work including a detailed discussion of task assignments planned for the operational period. The meeting will address potential safety concerns and procedures to ensure that proper safety measures are being utilized to accomplish their assigned tasks.

5.2 DAILY REPORTS

Daily Work Orders [DWO] will be generated by the RM and submitted to the OSC on a daily basis. The RM will prepare and submit the DWO to the OSC detailing the site tasks and operations performed for that reporting period. The DWO details each task accomplished, those tasks in progress, as well as the resources required on-site to accomplish the tasks to be undertaken. The RM shall also provide the OSC with daily/weekly oral reports, as directed, to update the OSC on site progress and to discuss any issues that need to be addressed.

5.3 COST TRACKING

ER will utilize RCMS to generate and track all site costs during the duration of the project. This cost tracking will entail the FCA compiling the actual and committed costs on a daily basis and entering them into the 1900-55 cost tracking module. This will include all labor, equipment and other field cost charges applicable to that period. Once the daily 1900-55 is completed, it will be reviewed by the RM prior to submittal to the EPA OSC for final approval.

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